



13 / Appeal
Brief
N.E.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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GROUP 250

In re Application: ELECTRONIC TRACK LIGHTING SYSTEM

Applicant: Ole K. Nilssen

Serial Number: 07/611,334

Filing Date: 11/13/90

Art Unit: 252

Examiner: DAVID MIS

Applicant's phone number: 708-658-5615

I, OLE K. NILSSEN, HERewith
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APPEAL BRIEF

Commissioner of Patents and Trademarks
Washington, D.C. 20231

Pursuant to NOTICE OF APPEAL, Applicant herewith provides
an Appeal Brief.

A check (#3874) \$120.00 is enclosed.

Status of Claims

The pending claims are 1-18.

No claims are allowed.

Claims 1-18 are rejected under 35 USC 103 as being
unpatentable over Spira and Galindo.

All Examiner's rejections are being appealed.

A copy of claims 1-18 is attached hereto by way of an
Appendix entitled CLAIMS on APPEAL in Serial No. 07/611,334.

Status of Amendments

There has been no amendment filed subsequent to Examiner's
final rejection.

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Summary of Invention

The invention is concisely described by claims 1 and 2, as follows.

1. An arrangement comprising:

a source (S -- see 1st full paragraph at page 4 of the specification) providing a power line voltage between a first and a second power line terminal (PLW -- 1st full paragraph at page 4);

a power track (TM -- 1st full paragraph at page 4) having a first and a second track conductor (TC -- 1st full paragraph at page 4); the power track being operative to receive and hold a number of track lighting units (e.g., HFTLU2 -- 3rd full paragraph at page 4); each one track lighting unit having a pair of load terminals (i.e., such as those indicated by the arrow-like symbols associated with HFTLU2); which load terminals, when the one track lighting unit has been received and is indeed being held by the power track, make electrical connection with the track conductors; and

voltage conditioner means (FCPS -- 1st full paragraph at page 4) connected in circuit between the power line terminals and the track conductors; the voltage conditioner means being operative to convert the power line voltage provided between the power line terminals to a track voltage provided between the track conductors; there being, through the voltage conditioner means, an electrical conduction path (e.g., via elements PWa1, PWa2, Qa and BR of Fig. 4 -- see the bottom half of page 4 and the top half of page 5) between the first track conductor and one of the power line terminals; the fundamental frequency of the track voltage being substantially higher than that of the power line voltage.

2. The arrangement of claim 1 wherein the absolute instantaneous magnitude of the track voltage is substantially equal to that of the power line voltage during a significant part of each half-cycle of the power line voltage.

Issues

The single issue presented for review is:

(1) The appropriateness of Examiner's "103" rejection of claims 1-18.

Grouping of Claims

The claims at issue are grouped as follows:

Group 1: Claims 1-18, rejected under 35 USC 103.

ARGUMENTS

Examiner rejected claims 1-18 under 35 USC 103 as being unpatentable over Spira and Galindo.

Applicant traverses these rejections for the following reasons.

(a) Exemplary claim 1 includes, in combination:

"a source providing a power line voltage between a first and a second power line terminal";

"a power track having a first and a second track conductor"; and

"voltage conditioner means connected in circuit between the power line terminals and the track conductors ... there being, through the voltage conditioning means, an electrical conduction path between the first track conductor and one of the power line terminals; the fundamental frequency of the track voltage being substantially higher than that of the power line voltage". (Emphasis added)

This feature is neither described nor suggested by Spira and/or Galindo.

Neither in Spira nor in Galindo is there "an electrical conduction path between the first track conductor and one of the power line terminals"; nor, in Spira and/or Galindo, is there even the faintest hint of a suggestion to the effect that it might be beneficial to provide for such "an electrical conduction path between the first track conductor and one of the power line terminals". In actual fact, both Spira and Galindo provide for electrical isolation "between the first track conductor and one of the power line terminals".

(b) In supporting his rejections, Examiner states that:

"the references are plain and clear teachings of the invention. The "person of ordinary skill in the art" knows the details of every reference in the related art and possesses a high level of skill".

Express provisions of MPEP 706.02 notwithstanding, Examiner has plainly failed to set forth "the difference or differences in the claim over the applied references". Without Examiner so doing, Applicant is prevented from properly analyzing and evaluating Examiner's rejections and is therefore being deprived of due process; in the absence of which Examiner has no basis on which to reject Applicant's claims.

(c) Express provisions of MPEP 706.02 notwithstanding, Examiner has also failed to set forth "the proposed modification of the applied reference(s) necessary to arrive at the claimed subject matter". Without Examiner so doing, Applicant is prevented from properly analyzing and evaluating Examiner's rejections and is therefore being deprived of due process; in the absence of which Examiner has no basis on which to reject Applicant's claims.

(c) Express provisions of MPEP 706.02 notwithstanding, Examiner has also failed to set forth "an explanation why such proposed modification would be obvious". Without Examiner so doing, Applicant is prevented from properly analyzing and evaluating Examiner's rejections and is therefore being deprived of due process; in the absence of which Examiner has no basis on which to reject Applicant's claims.

(d) Exemplary claim 2 defines the arrangement of claim 1 wherein:

"the absolute instantaneous magnitude of the [high frequency] track voltage is substantially equal to that of the power line voltage during a significant part of each half-cycle of the power line voltage".

This feature is neither described nor suggested by either of the applied references.

(e) Exemplary claim 3 defines the arrangement of claim 1 wherein:

"the first track conductor is ... alternately and periodically switched between the first and the second power line terminal at the frequency of the track voltage".

This feature is neither described nor suggested by either of the applied references.

(f) Exemplary claim 4 defines the arrangement of claim 1 wherein:

"the first track conductor is ... periodically connected with the first power line terminal".

This feature is neither described nor suggested by either of the applied references.

(g) Exemplary claim 5 includes:

"voltage conditioner means ... functioning ... repeatedly and periodically to connect ... the first track conductor with the first power line terminal".

This feature is neither described nor suggested by either of the applied references.

(h) Etc., etc.

(i) In further supporting his position, Examiner states that:

"The ... affidavit filed November 13, 1990 disagrees with the arguments in the office action of October 18, 1990. However, one of ordinary skill is not limited to usual uses." (Emphasis added)

That statement is non-appropos.

Clearly, a person of ordinary skill "is not limited to usual uses". However, that is clearly not the issue. Rather, the issue is whether or not it would have been obvious for such a person of ordinary skill to seek to use the combination of Spira and Galindo for such "unusual uses" as inherent in the combination of the claimed invention.

Moreover, neither Spira nor Galindo provides even the faintest hint of a suggestion to the effect that it might be beneficial to combine their teachings to provide for such "unusual uses".

(j) Then, with respect to the combination of Spira and Galindo, Examiner goes on to state that:

"The benefits are clear and obvious".

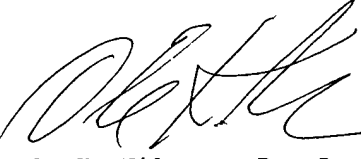
Yet, Examiner has utterly failed to identify those benefits -- at least in a manner that is capable of being understood by a person having ordinary skill in the art pertinent hereto.

Moreover, Examiner has utterly failed to identify where and/or how such benefits might have been suggested by the two applied references -- whether taken individually and/or in combination.

Apparently, Examiner believes that there is a benefit associated with using "Track means ... in place of wires". --- Now, if that were the case, why would not "Track means" be used everywhere "in place of wires"?.

As a person having but a modicum of familiarity with the art pertinent hereto would readily understand, there is no universal benefit associated with using "Track means ... in place of wires". Instead, "Track means" may in certain situations be beneficial to use "in place of wires". Yet, in most situations by far, there is no benefit whatsoever in using "Track means ... in place of wires": quite the contrary; which position is authoritatively supported by Mr. Fiene's expert testimony as presented in his Affidavit.

Thus, the question is this: does Spira and/or Galindo suggest a situation where it would be beneficial to use power tracks instead of ordinary wires? --- If Examiner believes that the answer to that question is "yes", he must identify where and/or how Spira and/or Galindo provide for such suggestion.



Ole K. Nilssen, Pro Se Applicant



CLAIMS on Appeal in Serial No. 07/611,334

1. An arrangement comprising:

a source providing a power line voltage between a first and a second power line terminal;

a power track having a first and a second track conductor; the power track being operative to receive and hold a number of track lighting units; each one track lighting unit having a pair of load terminals; which load terminals, when the one track lighting unit has been received and is indeed being held by the power track, make electrical connection with the track conductors; and

voltage conditioner means connected in circuit between the power line terminals and the track conductors; the voltage conditioner means being operative to convert the power line voltage provided between the power line terminals to a track voltage provided between the track conductors; there being, through the voltage conditioner means, an electrical conduction path between the first track conductor and one of the power line terminals; the fundamental frequency of the track voltage being substantially higher than that of the power line voltage.

2. The arrangement of claim 1 wherein the absolute instantaneous magnitude of the track voltage is substantially equal to that of the power line voltage during a significant part of each half-cycle of the power line voltage.

3. The arrangement of claim 1 wherein the first track conductor is, via action occurring within the voltage conditioner means, alternately and periodically switched between the first and the second power line terminal at the frequency of the track voltage.

4. The arrangement of claim 1 wherein the first track conductor is, via action taking place within the voltage conditioner means, periodically connected with the first power line terminal; such that, while such connection is taking place, the electrical potential of the first track conductor is substantially the same as that of the first power line terminal.

5. An arrangement comprising:

a source providing a power line voltage between a first and a second power line terminal;

a power track having a first and a second track conductor; the power track being operative to receive and releaseably hold a number of track lighting units; each one track lighting unit having a pair of load terminals; which load terminals, when said one track lighting unit has been received and is indeed being held by the power track, make electrical connection with the track conductors; and

voltage conditioner means connected in circuit between the power line terminals and the track conductors; the voltage conditioner means being characterized by functioning: (i) repeatedly and periodically to connect for a brief period of time the first track conductor with the first power line terminal, and (ii) in such manner as to provide between the track conductors a track voltage having a fundamental frequency substantially higher than that of the power line voltage.

6. The arrangement of claim 5 wherein the brief period of time has a duration that is approximately equal to half that of the fundamental period of the track voltage.

7. An arrangement comprising:

a source providing a power line voltage between a first and a second power line terminal;

a power track having a first and a second track conductor; the power track being operative to receive and releaseably hold a number of track lighting units; each one track lighting unit having a pair of load terminals; which load terminals, when said one track lighting unit has been received and is indeed being held by the power track, make electrical connection with the track conductors; and

voltage conditioner means connected in circuit between the power line terminals and the track conductors; the voltage conditioner means being characterized by functioning: (i) periodically and alternately to cause electrical connection between the first track conductor and the first and second power line terminals, and (ii) to provide between the track conductors a track voltage having a fundamental frequency substantially higher than that of the power line voltage.

8. An arrangement comprising:

a source providing a power line voltage between a first and a second power line terminal;

a power track having a first and a second track conductor; the power track being operative to receive and releaseably hold a number of track lighting units; each one track lighting unit having a pair of load terminals; which load terminals, when said one track lighting unit has been received and is indeed being held by the power track, make electrical connection with the track conductors; and

voltage conditioner means connected in circuit between the power line terminals and the track conductors; the voltage conditioner means being: (i) operative to provide between the track conductors a track voltage having a fundamental frequency substantially higher than that of the power line voltage, and (ii) characterized by causing the electrical potential of the first track conductor to be substantially equal to that of the first power line terminal during a significant portion of each half-cycle of the track voltage.

9. An arrangement comprising:

power track means having track conductors and track receptacle means; the power track means being mounted on a ceiling and connected in circuit with the power line voltage of an ordinary electric utility power line;

plural track lighting units; each track lighting unit having connection means removably inserted into the track receptacle means, such as to be disconnectably held thereby; each track lighting unit having power input terminals and power output terminals; the power input terminals of each given track lighting unit being connected with the track conductors as long as the connection means of that given track lighting unit is indeed inserted into the track receptacle means; the power output terminals of at least one track lighting unit being connected with a low voltage incandescent lamp requiring for its proper operation to be supplied with a lamp voltage having RMS magnitude substantially lower than that of the power line voltage; and

frequency conversion means connected in circuit between the power line and the incandescent lamp in such manner as to be functional to supply to the low voltage incandescent lamp a voltage having RMS magnitude substantially lower than that of the power line voltage and frequency substantially higher than that of the power line voltage;

whereby the low voltage incandescent lamp is indeed properly powered.

10. The arrangement of claim 9 wherein the lamp voltage is further characterized by periodically varying in magnitude between substantially zero and a certain peak level; the periodic magnitude variations having a fundamental frequency equal to twice the frequency of the power line voltage.

11. The arrangement of claim 9 wherein, whenever it is indeed being supplied, the lamp voltage has an absolute instantaneous magnitude that varies in proportion with that of the power line voltage.

12. An arrangement characterized by:

(A) comprising:

a power track having a receptacle slot; and
plural lighting units, each disconnectably attached to the power track via the receptacle slot; at least one of the lighting units having an incandescent lamp requiring for its proper operation to be supplied with a lamp voltage having RMS magnitude substantially lower than that of the power line voltage present on an ordinary electric utility power line;

as well as by:

(B) being:

powered from said ordinary electric utility line;

and

operative to supply to the incandescent lamp a voltage of RMS magnitude substantially lower than that of the power line voltage and fundamental frequency substantially higher than that of the power line voltage, thereby to properly power the incandescent lamp.

13. The arrangement of claim 12 wherein the lamp voltage actually supplied to the incandescent lamp has a fundamental frequency higher than about 10 kHz and a magnitude that varies periodically in synchronism as well as in proportion with the instantaneous absolute magnitude of the power line voltage.

14. The arrangement of claim 12 further characterized by comprising frequency-converting means so disposed and operated as to provide a track voltage of frequency substantially higher than that of the power line voltage across a pair of track conductors in the power track.

15. An arrangement comprising:

a power line providing a power line voltage at a pair of power line terminals; and

power track means having a pair of track conductors connected in circuit with the power line terminals; the power track means having a receptacle slot operative to receive and disconnectably hold a number of track lighting units; at least one track lighting unit being indeed held by the receptacle slot; said at least one track lighting unit having a lamp with a pair of lamp terminals; the lamp terminals being connected in circuit with the track conductors; an AC lamp voltage being provided across the lamp terminals; the AC lamp voltage having a fundamental frequency substantially higher than that of the power line voltage.

16. The arrangement of claim 15 wherein the lamp is an incandescent lamp.

17. The arrangement of claim 16 where the RMS magnitude of the AC lamp voltage is substantially lower than that of the power line voltage.

18. The arrangement of claim 15 wherein a frequency conversion means is interposed between the power line terminals and the track conductors, thereby to provide an AC track voltage between the track conductors; the AC track voltage having a fundamental frequency substantially higher than that of the power line voltage.

5. An arrangement comprising:

a source providing a power line voltage between a first and a second power line terminal;

a power track having a first and a second track conductor; the power track being operative to receive and releaseably hold a number of track lighting units; each one track lighting unit having a pair of load terminals; which load terminals, when said one track lighting unit has been received and is indeed being held by the power track, make electrical connection with the track conductors; and

voltage conditioner means connected in circuit between the power line terminals and the track conductors; the voltage conditioner means being characterized by functioning: (i) repeatedly and periodically to connect for a brief period of time the first track conductor with the first power line terminal, and (ii) in such manner as to provide between the track conductors a track voltage having a fundamental frequency substantially higher than that of the power line voltage.

6. The arrangement of claim 5 wherein the brief period of time has a duration that is approximately equal to half that of the fundamental period of the track voltage.

7. An arrangement comprising:

a source providing a power line voltage between a first and a second power line terminal;

a power track having a first and a second track conductor; the power track being operative to receive and releaseably hold a number of track lighting units; each one track lighting unit having a pair of load terminals; which load terminals, when said one track lighting unit has been received and is indeed being held by the power track, make electrical connection with the track conductors; and

voltage conditioner means connected in circuit between the power line terminals and the track conductors; the voltage conditioner means being characterized by functioning: (i) periodically and alternately to cause electrical connection between the first track conductor and the first and second power line terminals, and (ii) to provide between the track conductors a track voltage having a fundamental frequency substantially higher than that of the power line voltage.